

Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

Claims 1-7 (canceled)

8. (currently amended) The method of ~~claims 1, 2, 3, 4, 5, 6 or 7~~, also including claim 35, 36, 37, 38, 39, 40, or 41 comprising,

routing, by the first or second radio node, a fourth plurality of packets, received from ~~an~~ a third access terminal without an existing session, to a default RNC with whom the first or second radio node is associated.

9. (currently amended) The method of claim ~~1 or 2~~ 35 or 36, wherein ~~a~~ the first or second radio node receives paging requests from more than one radio network controller.

10. (currently amended) The method of claim ~~1 or 2~~ 35 or 36, wherein ~~a~~ the first or second radio node receives forward link traffic channel packets from more than one radio network controller.

11. (currently amended) The method of claim ~~1 or 2~~ 35 or 36, wherein ~~a~~ the first or second radio node sends reverse link traffic channel packets to more than one radio network controller.

12. (currently amended) The method of claim ~~1 or 2~~ 35 or 36, wherein traffic channel radio resources are managed in the first and second radio nodes and ~~a~~ the first or second

radio network controller requests radio resources from a the first or second radio node before adding any of its sectors to a traffic channel.

13. (currently amended) The method of claim ~~1 or 2~~ 35 or 36, wherein ~~said~~ the first and second radio network controllers reside in different locations and are connected via a metropolitan-area network.

14. (currently amended) The method of claim ~~1, 2 or 3~~ 36, 42 or 43, in which the first session association is transferred from ~~one~~ the first or second radio network controller in one subnetwork to another radio network controller in another subnetwork based upon a predetermined criterion.

15. (currently amended) The method of claim 14, wherein the session transfer is triggered by the first access terminal upon detection of a subnet change.

16. (currently amended) The method of claim ~~12~~ 14, wherein the session transfer is triggered by the network.

17. (currently amended) The method of claim ~~1, 2 or 3 also including~~ 35, 36, or 37 further comprising,

at the ~~serving~~ first radio network controller, selecting a packet data serving node to serve the first access terminal.

18. (currently amended) The method of claim ~~1 also including~~ 35 further comprising,

at the ~~serving~~ first radio network controller, using a mobility manager to maintain a current position of the first access terminal.

19. (currently amended) The method of ~~claims 1, 3, 4, 5 or 6~~ also including claim 36, 39, 42, 43, or 44 further comprising,

using an RNC ~~Resource Control Agent~~ resource control agent to assign sessions to the first and second radio network controllers.

20. (currently amended) The method of claim 19, wherein the RNC ~~Resource Control Agent~~ resource control agent resides on a separate server.

21. (currently amended) The method of claim ~~1, 2 or 3, wherein~~ 35, 39, or 48 further comprising,

determining, by an RNC ~~Resource Control Agent~~ resource control agent, ~~also determines the an~~ association between the RN's and their default RNC's.

22. (currently amended) The method of ~~claims claim 19 wherein~~ further comprising, performing, by the RNC ~~Resource Control Agent~~ resource control agent, ~~also performs~~ load balancing in assigning sessions to radio network controllers.

23. (currently amended) The method of ~~claims claim 19, wherein~~ further comprising,

selecting, by the RNC ~~Resource Control Agent~~ resource control agent, ~~also selects~~ a new RNC in network-initiated dormant handoffs.

24. (currently amended) The method of claim 19, wherein the ~~Radio Resource Control Agent~~ RNC resource control agent function is distributed among the radio network controllers and radio nodes, and the radio network controllers and the radio nodes continuously communicate resource information to each other to enable individual network nodes to make session assignment decisions on their own.

25. (currently amended) The method of claim 19, ~~wherein further comprising,~~
maintaining, by the RCN resource control agent, the Radio Resource Control Agent also
~~maintains~~ session information for all sessions under its control.

26. (currently amended) The method of claim ~~1, 2 or 3~~ 35, 39, or 42, wherein the
radio network controllers also include a PDSN function.

27. (currently amended) The method of claim 26, wherein the PDSN function
includes ~~the~~ Simple IP, Mobile IP and AAA client functions.

Claims 28-34 (canceled)

35. (new) A method comprising,
in connection with a mobile wireless network including a first and a second radio
network controller and a first and a second radio node,
establishing a first traffic channel between a first mobile access terminal and the first
radio network controller,
sending and receiving a first plurality of packets over the first traffic channel, the first
plurality of packets traveling between the first radio node and the first radio network controller
without passing through the second radio network controller,
establishing a second traffic channel between a second mobile access terminal and the
second radio network controller,
sending and receiving a second plurality of packets over the second traffic channel, the
second plurality of packets traveling between the second radio node and the second radio
network controller without passing through the first radio network controller, and
maintaining the first traffic channel as the first access terminal moves from a coverage area of
the first radio node to a coverage area of the second radio node, sending and receiving a third
plurality of packets over the first traffic channel, the third plurality of packets traveling between

the second radio node and the first radio network controller without passing through the second radio network controller.

36. (new) The method of claim 35 further comprising,
establishing a first session for the first mobile access terminal on the first radio network controller via the first radio node,
establishing a second session for the second mobile access terminal on the second radio network controller via the second radio node, and
maintaining the first session on the first radio network controller as the first access terminal moves from the coverage area of the first radio node to the coverage area of the second radio node while in dormant state.

37. (new) The method of claim 35 further comprising,
sending an access channel message from the first mobile access terminal to the first radio network controller via the second radio node and the second radio network controller.

38. (new) The method of claim 35 further comprising,
signaling between the first radio network controller and the second radio network controller when establishing a traffic channel between the first radio network controller and the first access terminal via the second radio node.

39. (new) The method of claim 35 further comprising,
routing access channel packets received from the first access terminal at the second radio node to the first radio network controller by determining an IP address of the first radio network controller using a session identifier.

40. (new) The method of claim 39 wherein,
the session identifier comprises a 1xEV-DO UATI.

41. (new) The method of claim 39 further comprising,
storing in the first and second radio nodes a mapping table for mapping the session identifier of the first access terminal to the IP address of the first radio network controller,
reading at the second radio node the session identifier included in an access channel message and looking up the IP address of the first radio network controller, and
encapsulating at least one of the access channel packets in an IP packet with a destination address equal to the IP address of the first radio network controller.

42. (new) The method of claim 35 further comprising,
establishing, via the first radio node, a first session for the first mobile access terminal on a selected radio network controller, the selected radio network controller comprising the first radio network controller or the second radio network controller,
establishing, via the second radio node, a second session for the second mobile access terminal on a selected radio network controller, the selected radio network controller comprising the first radio network controller or the second radio network controller, and
maintaining the first session on the selected radio network controller as the first access terminal moves from the coverage area of the first radio node to the coverage area of the second radio node while in dormant state.

43. (new) The method of claim 42 further comprising,
selecting the selected radio network controller in the first radio node based at least on the loading of the first and second radio network controllers.

44. (new) The method of claim 42 further comprising,
selecting the selected radio network controller in the first radio node based at least on the routing distance between the first radio node and the first and second radio network controllers.

45. (new) The method of claim 35 further comprising,
employing a chassis-based hardware platform with multiple server cards to implement
each of the first and second radio network controllers.

46. (new) The method of claim 45 further comprising,
routing incoming packets to appropriate server cards based on a session identifier using
an I/O card.

47. (new) The method of claim 46 wherein,
the session identifier comprises a 1xEV-DO UATI.

48. (new) The method of claim 35 further comprising,
establishing a first association between the first radio node and the first radio network
controller,
establishing a second association between the first radio node and the second radio
network controller,
establishing a third association between the second radio node and the first radio network
controller, and
establishing a fourth association between the second radio node and the second radio
network controller.

49. (new) A computer program product, tangibly embodied in an information carrier,
and configured to work in a mobile wireless network including a first and a second radio network
controller and a first and a second radio node, the computer program product comprising
instructions operable to cause data processing apparatus to,
establish a first traffic channel between a first mobile access terminal and the first radio
network controller,

send and receive a first plurality of packets over the first traffic channel, the first plurality of packets traveling between the first radio node and the first radio network controller without passing through the second radio network controller,

establish a second traffic channel between a second mobile access terminal and the second radio network controller,

send and receive a second plurality of packets over the second traffic channel, the second plurality of packets traveling between the second radio node and the second radio network controller without passing through the first radio network controller, and

maintain the first traffic channel as the first access terminal moves from a coverage area of the first radio node to a coverage area of the second radio node, sending and receiving a third plurality of packets over the first traffic channel,

the third plurality of packets traveling between the second radio node and the first radio network controller without passing through the second radio network controller.

50. A mobile wireless network comprising,

a first radio network controller,

a second radio network controller,

a first radio node,

a second radio node,

a first mobile access terminal that is associated with a first traffic channel established with the first radio network controller, the first mobile access terminal sending and receiving a first plurality of packets over the first traffic channel, wherein the first plurality of packets travel between the first radio node and the first radio network controller without passing through the second radio network controller, and

a second mobile access terminal that is associated with a second traffic channel established with the second radio network controller, the second mobile access terminal sending and receiving a second plurality of packets over the second traffic channel, wherein the second

plurality of packets travel between the second radio node and the second radio network controller without passing through the first radio network controller,

wherein the first traffic channel is maintained as the first access terminal moves from a coverage area of the first radio node to a coverage area of the second radio node, the first access terminal sending and receiving a third plurality of packets over the first traffic channel,

and wherein the third plurality of packets travel between the second radio node and the first radio network controller without passing through the second radio network controller.